



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,328	12/14/2001	Mario Tenuta	2527-1A1	1143
7590	04/14/2004			
Eric Fincham 316 Knowlton Road Lac Brome, QC J0E 1V0 CANADA			EXAMINER NAFF, DAVID M	
			ART UNIT	PAPER NUMBER
			1651	

DATE MAILED: 04/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/017,328	TENUTA ET AL.	
	Examiner	Art Unit	
	David M. Naff	1651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2 and 5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

An amendment of 11/25/03 canceled claims 1, 3 and 4, and added new claim 5.

Claims examined on the merits are 2 and 5, which are all claims
5 in the application.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being
10 unpatentable over Blodgett et al (newly applied) in view of Cooley
(6,300,282 B1) and Schisler et al (5,783,411) (newly applied), and if
necessary in further view of Davis et al (newly applied).

The claims are drawn to a method of controlling soilborne
pathogens in soil having a carbon content of less than 1.7% by weight
15 by adding a nitrogen containing material and an agent to raise the pH
of the soil to above 8.5. Claim 5 requires the agent for raising the
pH to be selected from agents including calcium hydroxide.

Blodgett et al disclose that when a soil heavily infected with
potato scab is limed ($\text{Ca}(\text{OH})_2$) to raise the pH to 8.5, 47% of potatoes
20 were clean, and when limed to pH 9.0, 91% of the potatoes were clean.

Cooley discloses (col 1, lines 34-45) providing nitrogen to
potato plants by dripping liquid urea ammonium nitrate of 28-32%
nitrogen onto sides of the potato hill or applying granular urea
ammonium nitrate onto sides of the potato hill, and repeating this

Art Unit: 1651

process in 7-10 days later. After this, liquid urea ammonium nitrate may be sent through irrigation water.

Schisler et al disclose (col 8, line 64) sandy clay loam field soil for growing potatoes having an organic matter content of 1.3%.

5 Davis et al disclose (page 35, last full paragraph) that while calcium sulfate was not effective on soils below pH 8.0, it reduced potato scab in soils of higher pH, and some Idaho desert soils commonly have a pH of 7.5-8.2.

10 When growing potatoes in soil limed to a pH 9.0 as suggested by Blodgett et al, it would have been obvious to apply liquid or granular urea ammonium nitrate to the soil to supply nitrogen as suggested by Cooley when growing potatoes, and it would have been obvious to grow potatoes in soil of less than 1.7% carbon content as suggested by Schisler et al disclosing sandy clay loam field soil for growing
15 potatoes having an organic matter content of 1.3%. If needed, Davis et al would have further suggested an alkaline pH soil for potatoes, and growing potatoes in Idaho desert soil that will inherently contain less than 1.7% by weight carbon.

Response to Arguments

20 Applicants' arguments are moot in view of the newly applied references. While Cooley may not disclose controlling soilborne pathogens, Blodgett et al clearly teach raising the pH of soil by liming to above 8.5 to control potato scab, which is a soilborne pathogen. When raising the pH as suggested by Blodgett et al, it

Art Unit: 1651

would have been obvious to add urea ammonium nitrate as suggested by Cooley to increase potato yield.

Applicants point out that Cooley is not an effective reference because of an issue date of Oct. 9, 2001. However, the date of effectiveness of a reference is its filing date and not its issue date. Cooley was filed on July 30, 1999, which is before the effective filing date of the present application of July 24, 2000.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David M. Naff whose telephone number is 571-272-0920. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David M. Naff
Primary Examiner
Art Unit 1651

DMN
4/12/04